

REMARKS

Claims 19, 20, 30-33, 35-40 and 42-45 are pending and under consideration in the above-identified application. Claims 1-14 stand withdrawn pursuant to a restriction requirement issued on June 25, 2008 and claims 15-18, 21-29, 34 and 41 were cancelled previously.

In the Office Action dated September 2, 2009, the Examiner rejected claims 19, 20, 30-33, 35-40 and 42-45.

With this Amendment, claims 30, 32, 37-39, 40 and 42-45 were amended and claims 19, 20 and 40 were cancelled. No new matter has been introduced as a result of the amendments.

I. Claim Objections

Claims 30, 32 and 39 were objected to by the Examiner for various informalities. Applicant amended the claims per the Examiner's recommendations. Accordingly, the above objections are now moot. As such, Applicant respectfully requests that the above objections be withdrawn.

II. 35 U.S.C. § 112 Indefiniteness Rejection of Claims

Claims 30 and 37 were rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. The claims were amended in order to require that sulfonic acid groups and/or sulfonate groups are introduced in an amount ranging from 0.1 mol % to 14.9 mol%. Support for this amendment can be found on at least page 7 of the specification. Accordingly, Applicant respectfully requests that the above rejection be withdrawn.

Claims 19, 20, 30-33, 35-36, 38-40 and 42-45 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant cancelled claims 19, 20 and

49 and amended claims 30-33, 35-36, 38-39 and 42-45 to provide a transitional phrase in claim 30 and appropriate antecedent basis for the terms “flame retarder” and “resin composition” in the above mentioned claims. As such, the above rejections are now moot. Accordingly, Applicant respectfully requests that the above rejections be withdrawn.

III. 35 U.S.C. § 102 Anticipation Rejection of Claims

Claims 30, 33, 37 and 40 were rejected under 35 U.S.C. § 102(b) as being anticipated by Mark (U.S. Patent No. 3,978,024). Applicant respectfully traverses this rejection.

The claims require a resin composition that includes a flame retarder. The flame retarder includes an aromatic polymer containing monomer units having aromatic skeletons in a side chain. The claims also require that sulfonic acid groups and/or sulfonate groups are introduced in an amount ranging from 0.01 mol% to 14.9 mol% onto the aromatic polymer. As a result, the resin composition has flame retardant properties and good mechanical strength due to the decreased amount of sulfonic acid and/or sulfonate groups introduced onto the aromatic polymer.

Mark teaches a resin composition that includes a polycarbonate which is sulfonated in 0.01 to 10% concentration of the polymer. Mark, Col. 3, lines 54-56. Additionally, Mark teaches that an aromatic radical R' is part of the main chain A and B as represented in formula 1. Mark, Col. 2, lines 26-34. However, Mark does not teach or even fairly suggest an aromatic polymer that includes monomer units having aromatic skeletons in a side chain as required by the claims. As such, Mark fails to teach or even fairly suggest all the required elements of the claims. Thus, claims 30, 33 and 37 are patentable over the cited reference. Accordingly, Applicant respectfully requests that the above rejection be withdrawn.

IV. 35 U.S.C. § 103 Obviousness Rejection of Claims

Claims 30-32, 35-39 and 42-44 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Inagaki et al. (U.S. Patent No. 5,994,423). Applicant respectfully traverses this rejection.

Inagaki et al. teaches a urine absorber by sulfonating a polymer containing sulfonic acid groups and/or sulfonate groups. Inagaki et al., Abstract. However, Inagaki et al. fails to teach or even fairly suggest an aromatic polymer that includes monomer units having aromatic skeletons in a side chain as required by the claims.

Additionally the structure of the claims would not have been obvious in light of Inagaki et al., because Inagaki et al. is directed to urine absorption, not flame retardant properties as required by the claims. As such, Inagaki et al. provides no reason which would have prompted one of ordinary skill to modify the invention disclosed by Inagaki et al. so as to reach the requirements of the present claims. Furthermore, the Examiner has provided no evidence that there would have been a reasonable expectation of success of such modification. MPEP § 2143; *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. ___, Slip Op No. 04-1350, 119 Fed. Appx. 282 (April 30, 2007). Here, Inagaki et al. merely teaches a compound that is suitable for urine absorption but does not teach or even fairly suggest the resin composition required by the claims, which includes monomer units having aromatic skeletons in a side chain. Thus, claims 30-32, 35-39 and 42-44 are patentable over the cited reference. Accordingly, Applicant respectfully requests that the above rejection be withdrawn.

Claims 30, 33, 37, 40 and 45 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bialous et al. (U.S. Patent No. 4,391,935) in view of Mark. Applicant respectfully traverses this rejection.

Bialous teaches a flame retardant resin composition that includes a polycarbonate compound and sulfonates. Bialous, Abstract & Table. However, as admitted by the Examiner Bialous does not teach or even fairly suggest that sulfonate compounds are part of the aromatic polymer. Office Action, page 7. Furthermore, as discussed above, Mark fails to teach or even fairly suggest the resin composition required by the claims, which includes monomer units having aromatic skeletons in a side chain. As such, taken either singularly or in combination with each other, the above cited references fail to teach or even fairly suggest all the claimed limitations. Thus claims 30, 33, 37 and 45 are patentable over the above cited references. As such, Applicant respectfully requests that the above rejection be withdrawn.

V. Conclusion

In view of the above amendments and remarks, Applicant submits that all claims are clearly allowable over the cited prior art, and respectfully requests early and favorable notification to that effect.

Respectfully submitted,

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